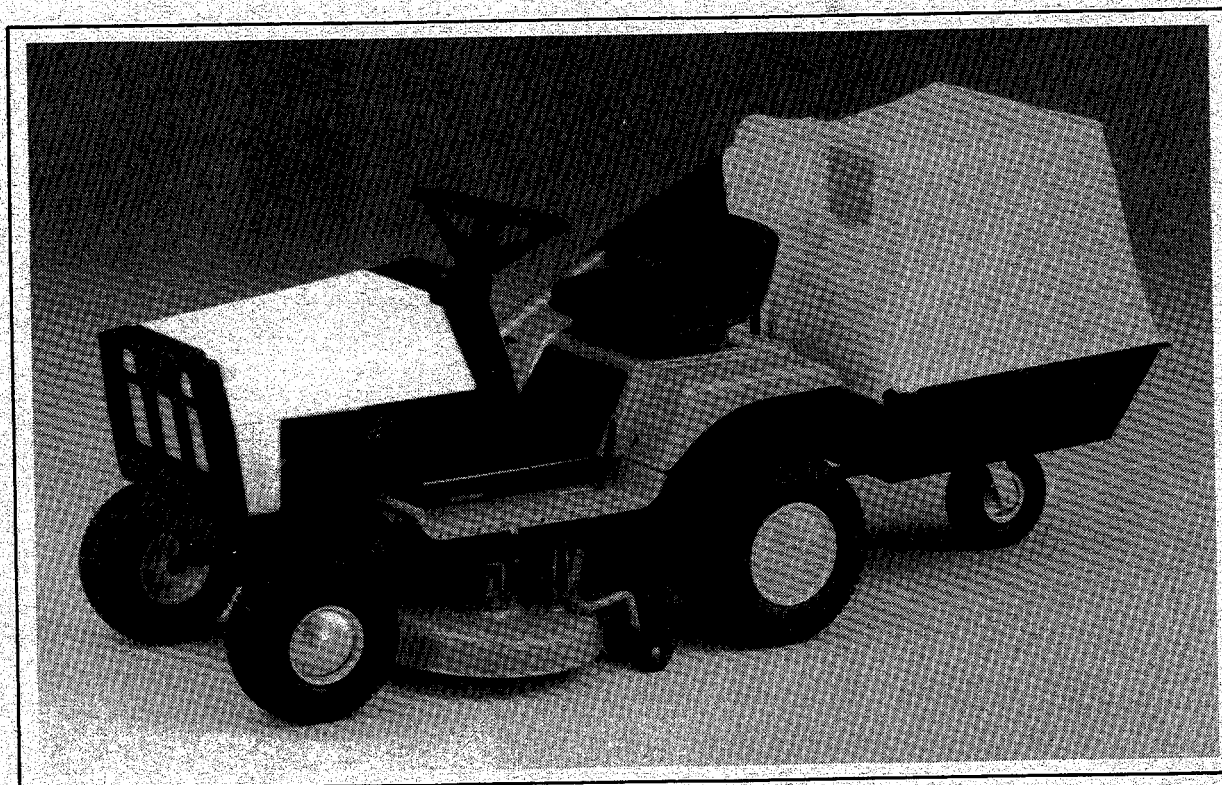


OPERATOR'S MANUAL CART COLLECTOR



FORM - 1701946
PRINTED IN U.S.A.
878

CART COLLECTOR FOR RIDING MOWERS
AND LAWN TRACTORS
MFG. NO. 1691524

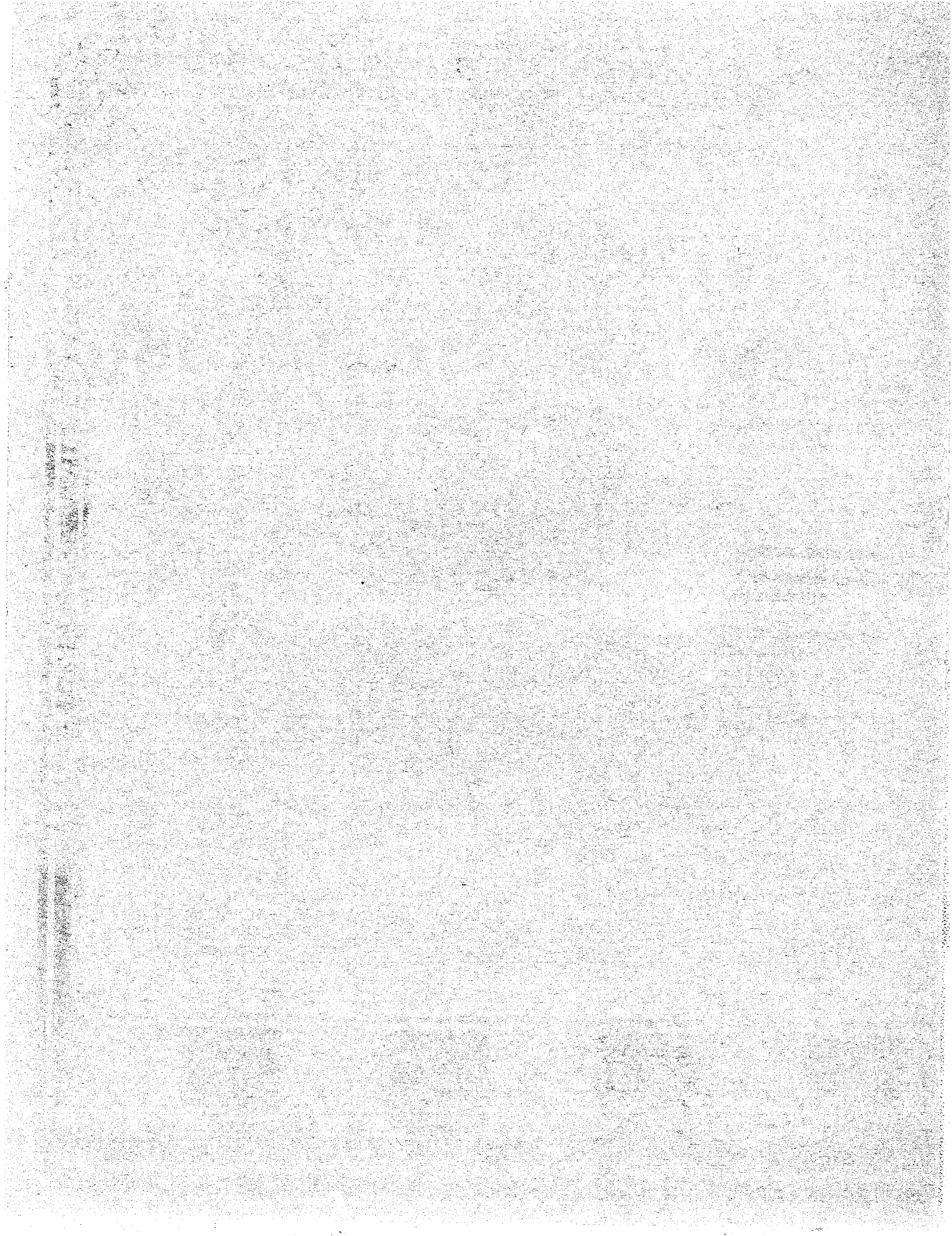


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Specifications

Over-all Length: 40 in.

Width: 27 in.

Height: 42 in.

Inside Box Length: 31 in.

Width: 25 in.

Height: 8 in.

Box Capacity: 4 cu. ft.

Weight Capacity: 250 lbs.

Grass Capacity: 10 bushels

Pneumatic Tire Size: 410/350 x 4

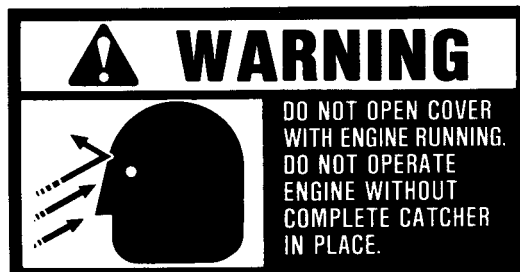
Recommended Accessories

On lawn tractors, rear wheel weights are recommended for slopes over 15% (8.5°). Never operate on slopes greater than 30% (16.7°).

Decals




NOTE: To clean clear mid-tube on Deluxe Grass Catcher wash with warm water and mild soap or detergent. Use a soft clean sponge or cloth. DO NOT use abrasive, alkaline, or petroleum based cleaners.



Safety Rules



Read these safety rules and the safety rules in your Operator's Manual and follow them closely. Failure to obey these rules could result in loss of control of vehicle, severe personal injury to yourself, or damage to property or equipment. The triangle  in the text signifies important cautions or warnings which must be followed.

1. Know the controls and how to stop the tractor quickly. READ THE TRACTOR'S OWNER'S MANUAL.
2. Shut the engine (motor) off before attaching, adjusting or disconnecting the collection system.
3. Check the cart to make sure it is attached securely to tractor.
4. Check the latch handle to make sure it is engaged so the cart's box is locked to the frame.
5. Look behind to make sure the area is clear before backing up.
6. DO NOT turn sharply when the tractor is alongside a building or any object.
7. DO NOT carry passengers in the cart.
CAUTION:
8. For added tractor stability and to prevent tipping or loss of control;
 - A. DO drive in reduced speed on uneven ground and when turning corners.
 - B. Reduce loads on hillsides. It is recommended that the Collection System be kept only half full when negotiating any slopes. Start mowing on slopes when the Collection System is empty.
 - C. Mow up and down the face of slopes; **never across the face of any slope.**
9. **CAUTION:** Objects may be thrown from mower.
For your safety:
 - A. DO NOT remove the cover while the mower blades are turning. Shut off the engine before opening the door or removing the grass chute.
 - B. Be sure the complete Collection System is in place (cover secure and grass chute connected) before operating the mower.
 - C. DO check the cart cover frequently for wear and tear. Replace with new cover for safety protection.
10. For best results when mowing grass: Set the mower to cut from 1 to 2 inches of grass. If grass is exceptionally tall, set your mower as high as possible for first cutting. Lower cutting height at succeeding cuttings until proper height is reached. It may be necessary to mow tall grass at a slower tractor speed.

Assembly

CART BASKET

1. Remove all parts from inside the cart's box. Open the bag of parts and sort the fasteners into groups for easier assembly of the cart. See figure 1.
2. Turn cart box on side.
 - a. Bolt U-bracket to bottom of box with two 5/16 x 3/4 long round head bolts. Secure with two 5/16 lockwashers and nuts.
 - b. Bolt latch handle to front side of box. Place one 5/16 x 1 long hex bolt with 5/16 flat washer through the inside of the box. Next place a 5/16 flat washer, latch handle, 5/16 flat washer, spring washer (side with grooves on outside), and locknut. Tighten the locknut until the latch handle moves slowly.
3. Bolt swivel wheel to the H-frame.
 - a. Place the head of the swivel (end with four slotted holes) inside the H-frame (side with the ends bent upward).
 - b. Align the holes and place four 3/8 x 1 long hex bolts with 3/8 flat washers through the head of the swivel and frame.
 - c. Secure with four lockwashers and nuts.
4. Turn cart's box upside down and install H-frame to U-bracket.
 - a. Align the two ends of the H-frame (end with the swivel wheel attached) to the U-bracket and secure with two 1/2 x 1-1/4 long hex bolts and 1/2 locknuts.
 - b. **DO NOT** over tighten the locknuts. The box pivots at this point for dumping.
5. Turn latch handle to lock the H-frame to the cart's box and turn cart upright.

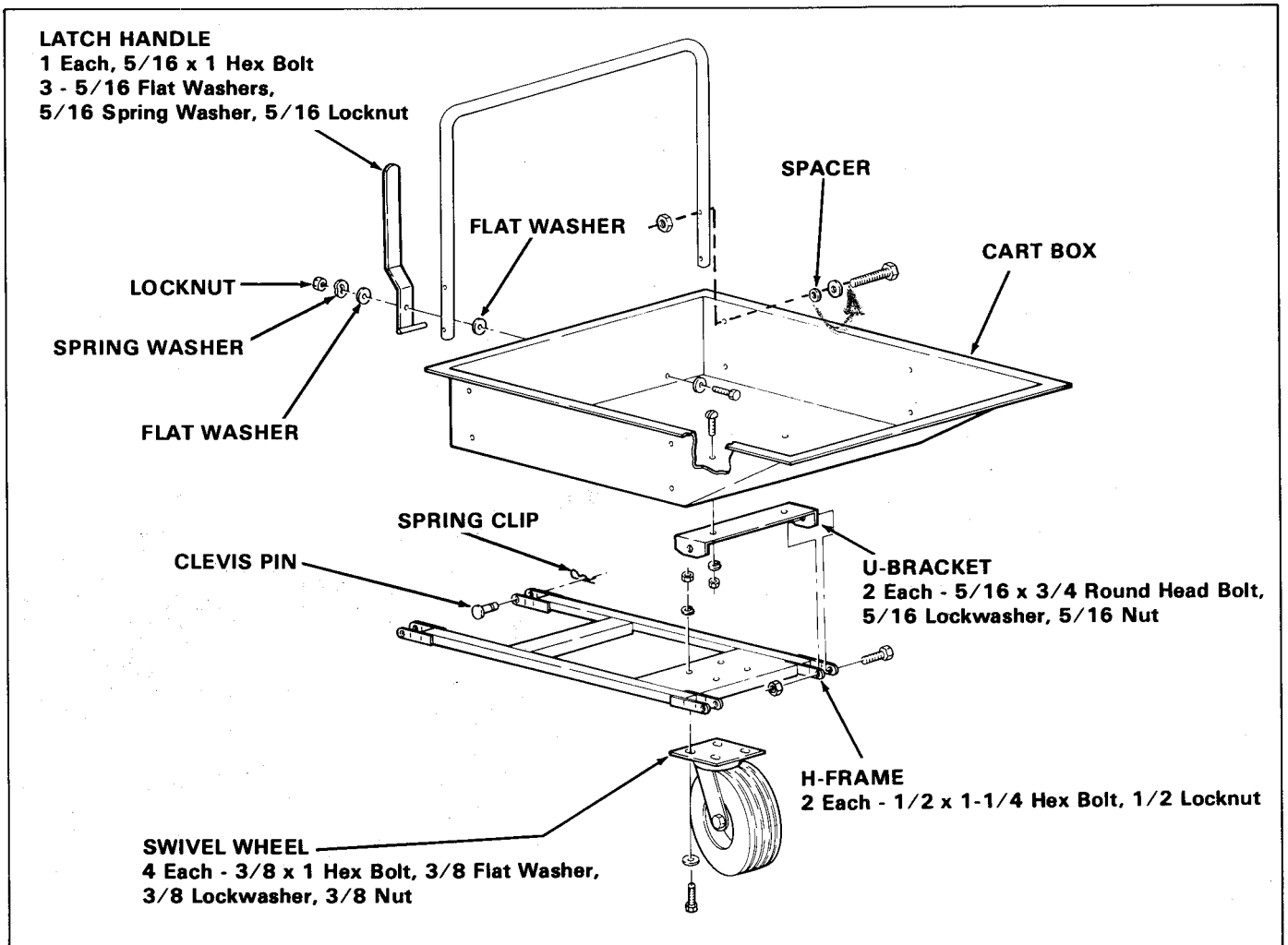


Figure 1.

BRACKET INSTALLATION

The cart collector attaches to a mounting bracket, which is bolted to the riding mower's drawbar or to the lawn tractor's back plate. The same bracket is used on the riding mowers and the lawn tractors. Once bolted in place the bracket never needs to be removed. There is a new drawbar hole in the bracket for other attachments.

For rear engine riders see Section A; for lawn tractors, see Section B.

Section A. Bracket Installation on Rear Engine Rider (3000 Series)

1. Before installing the bracket (figure 2) to the drawbar, remove the 5/16-18 x 1-1/4 hex bolt, which is located on the back plate. Discard the bolt.

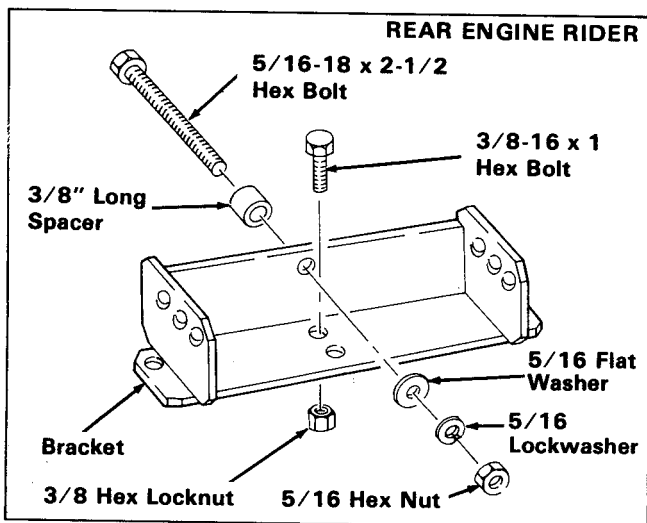


Figure 2.

2. Install the bracket to the drawbar with the 3/8-16 x 1 hex bolt (A, figure 3) lockwasher, and nut.
3. Install the bracket to the backplate by inserting the 5/16-18 x 2-1/2 hex bolt (B) from the inside out, through the backplate, 3/8 inch long spacer, and bracket. Secure with 5/16 flat washer, lockwasher and nut.
4. Drawbar hole is item C, figure 3.

Section B. Bracket Installation on Lawn Tractor (600, 4000, 5000 Series)

1. Remove the drawbar plate from the back plate of the lawn tractor.
2. Install the bracket (figure 4) to the back plate through the same holes where the drawbar plate was bolted. Use the three 3/8-16 x 1 hex bolts and nuts.
3. Drawbar hole is item B, figure 5.

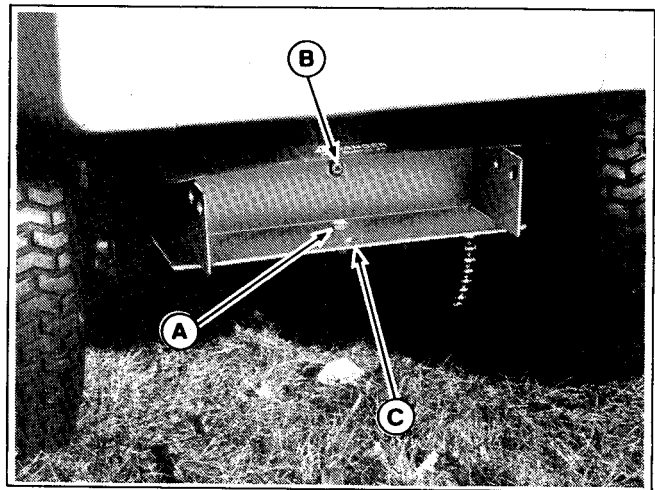


Figure 3.

- A. Bolt (to drawbar)
B. Bolt (to backplate)
C. Drawbar Hole

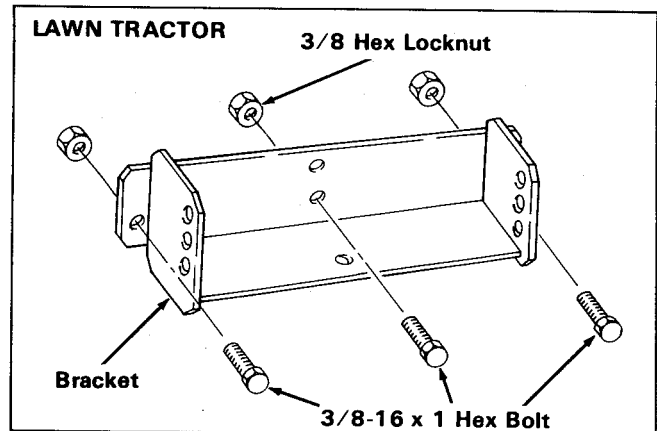


Figure 4.

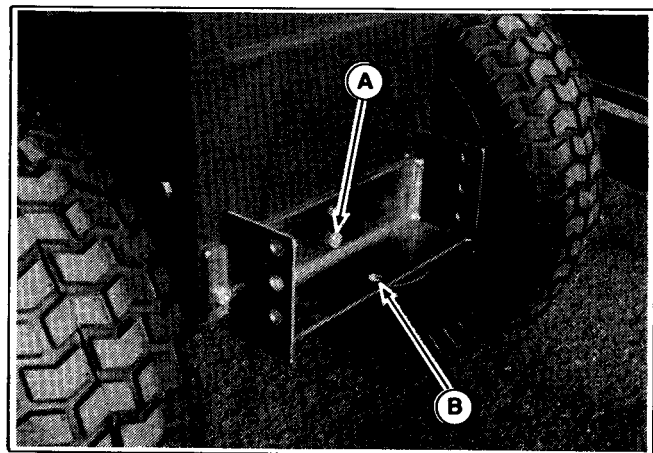


Figure 5.

- A. Mounting Hardware (3 Locations)
B. Drawbar Hole

FRAME AND COVER

1. Install the frame (A, figure 6) at four locations (B) with 5/16-18 x 1-1/2 capscrew, washer and nut. Install spacers (C) at top capscrew on each side between washer and cart box. Refer to figure 1 for correct assembly order.
2. Attach the bracket (D, figure 6) with two 5/16-18 x 1-3/4 bolts (E), washers and nuts. Attach strap (F) with lower set of hardware.

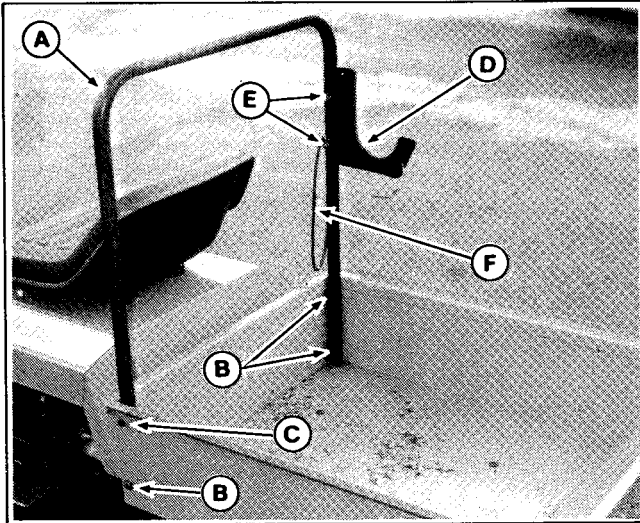


Figure 6.

- | | |
|-----------------------|------------|
| A. Frame | D. Bracket |
| B. Fastener Locations | E. Bolt |
| C. Spacer | F. Strap |

3. The support rod (B, figure 7) and frame rod (C) must be inserted into the cover (A) as follows:

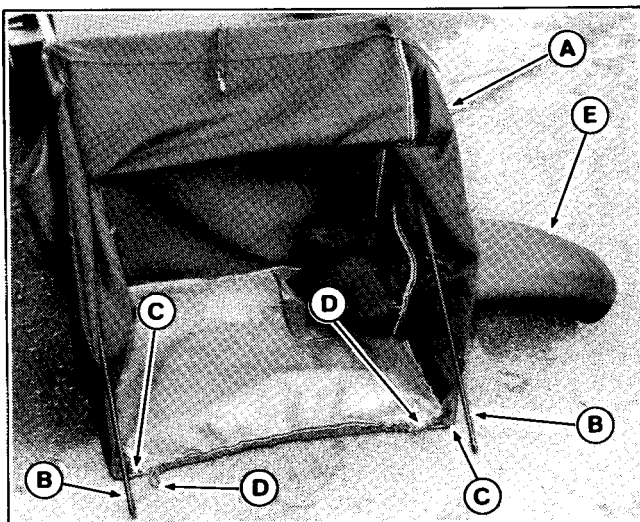


Figure 7.

- | | |
|----------------|---------------|
| A. Cover | D. Cord Loops |
| B. Support Rod | E. Elbow |
| C. Frame Rod | |

- a. The frame rod (C) must be inserted through the bottom sleeve of the cover so that the two bent ends extend out openings, which are next to the cord loops (D). The frame rod position is indicated by dotted line (B, figure 8).

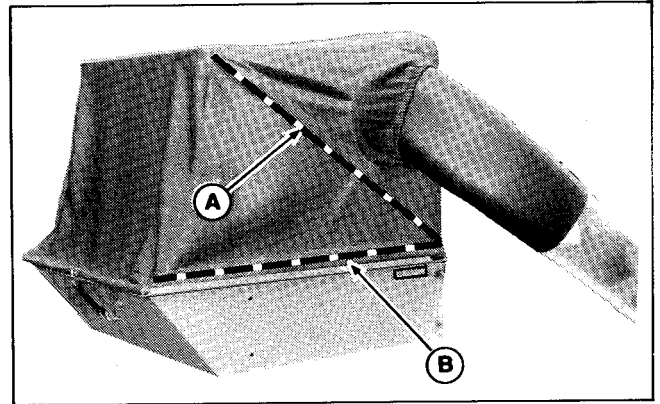


Figure 8.

- | |
|-------------------------|
| A. Support Rod Location |
| B. Frame Rod Location |

- b. The support rod (B, figure 7), which has eyebolt ends, must be threaded through the sleeve inside the cover. The position is indicated by dotted line (A, figure 8).

4. Insert the elbow (E, figure 7) into the cover opening.

NOTE

When you pick up the cover to place over the frame, be sure support rod (B, figure 7) is inside frame rod (C).

5. Pick up the cover and place down onto the frame inserting the elbow (A, figure 9) into the bracket (B) (shown without cover for clarity). Pull the rubber strap (C) over the elbow and hook into bracket as shown.

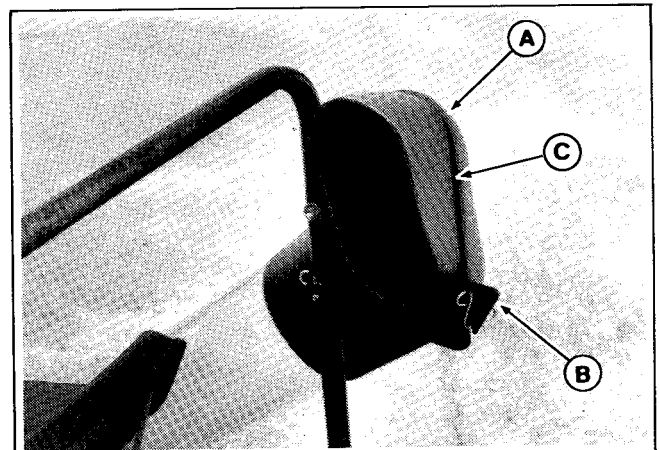


Figure 9. (Shown with cover for clarity.)

- | | | |
|----------|------------|----------|
| A. Elbow | B. Bracket | C. Strap |
|----------|------------|----------|

- On each side, place the eyebolt end of the support rod (A, figure 10) onto the frame rod (B), then insert frame rod through the frame (C). Insert clip (D) through frame rod to secure.

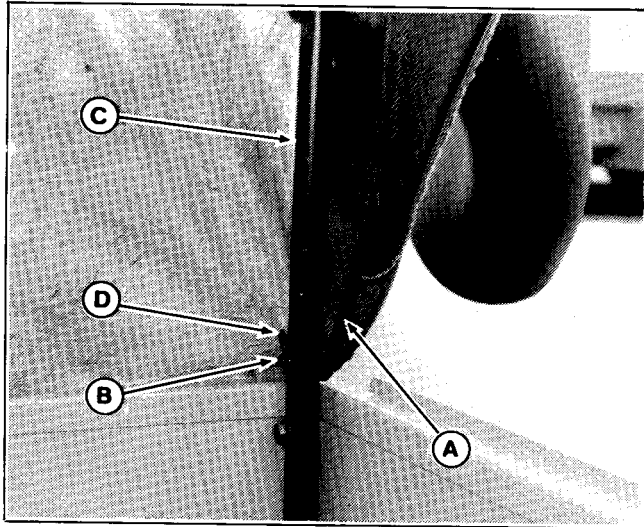


Figure 10.

- A. Support Rod
- B. Frame Rod
- C. Frame
- D. Clip

- Insert an "S" hook to each end of the strap (A, figure 11). Hook one end through clip (B) and pinch closed with a pliers.

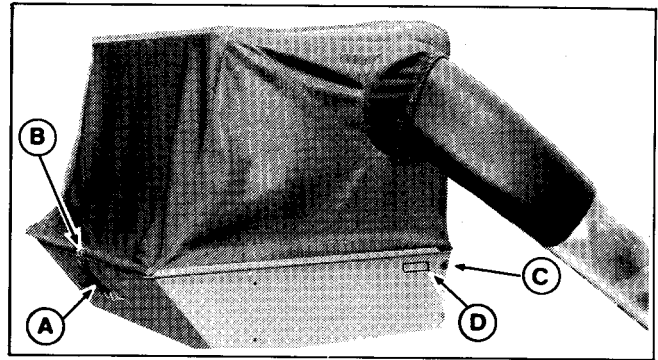


Figure 11.

- A. Strap
- B. Clip
- C. Cord Loops
- D. Decal

- Pull the cover down so it appears as in figure 11. To secure the front, pull the cord loops (C) onto the spacers. To secure the rear, hook the strap (A) onto back of cart as shown.
- Install warning decal (D, figure 11) so it is visible from right-hand side. Make sure surface is clean. Remove backing paper and tack edge of decal in position. Then apply decal with heel of hand, smoothing out bubbles. The edge of a ruler can also be used.



WARNING

It is important for operator safety, that the warning decal be installed as shown in figure 11.

Installation

1. Remove the mower from the tractor. Refer to tractor Operator's Manual for instructions.
2. Remove the mower deflector (A, figure 12) by removing two carriage bolts, lockwashers and nuts (B). Save this hardware for use when adaptor is removed from side discharge.

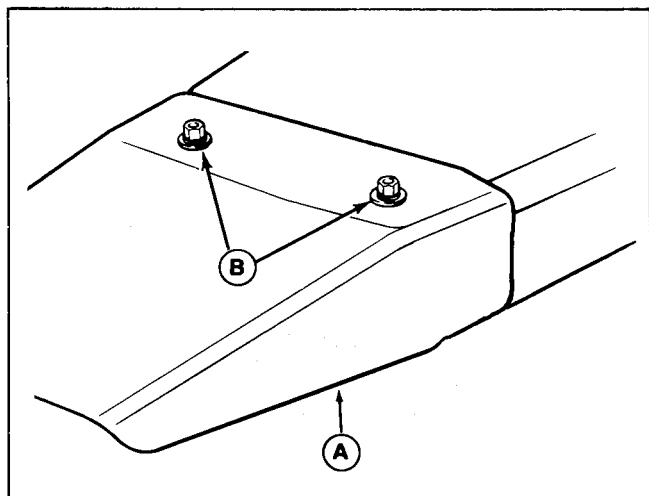


Figure 12.

- A. Deflector
B. Mounting Hardware

3. Install the blade baffle as follows:
 - a. Make sure the retainer nut (A, figure 13) is in the baffle.
 - b. Install the baffle (B) into deck with the whizlock screw (C).
 - c. Install the carriage bolt (D), lockwasher (E) and nut (F).
4. Install the discharge baffle (A, figure 14) as shown:
 - a. Insert bolt (L) and install push nut (K) fully onto threads to hold bolt (L) in place. (The lockwasher (F), washer (H) and nut (J) will be used later to install adaptor).
 - b. Install self-tapping screw (B) from underneath side of mower deck.
 - c. Install bolt (C) from outside mower deck and secure with flat washer (F), lockwasher (H) and nut (J).
 - d. Install bolt (D) from inside mower deck and secure with flat washer (E), lockwasher (G) and nut (I).

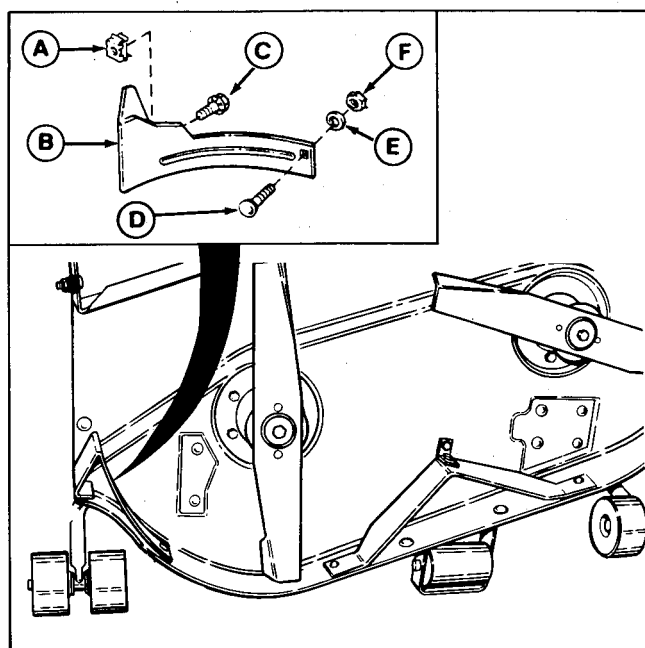


Figure 13.

- A. Retainer Nut
B. Deflector Baffle
C. Whizlock Screw
D. Carriage Bolt
E. Lockwasher
F. Nut

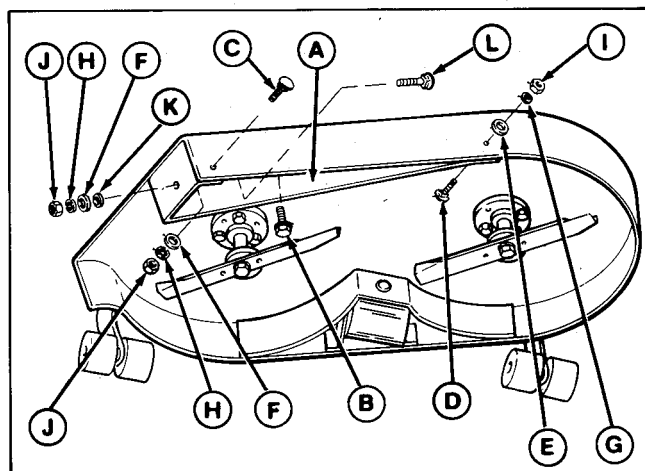


Figure 14

- A. Baffle
B. Screw, Self Tapping, 5/16-18 x 1/2
C. Bolt, Carriage, 3/8-16 x 3/4
D. Bolt, Carriage, 5/16-18 x 7/8
E. Washer, 1/4
F. Washer, 3/8
G. Lockwasher, 5/16
H. Lockwasher, 3/8
I. Nut, 5/16-18
J. Nut, 3/8-16
K. Push Nut
L. Bolt, Carriage, 3/8-16 x 3/4

- Remove the mower blades and install the new blades with tabs pointing up toward mower deck. Install the washers and capscrew. Make sure the spline washer engages the shaft splines. Make sure the cup washer is installed concave side up (toward mower deck). Block the blade and torque capscrew to 60 ft. lbs. Note the difference between the two blades.

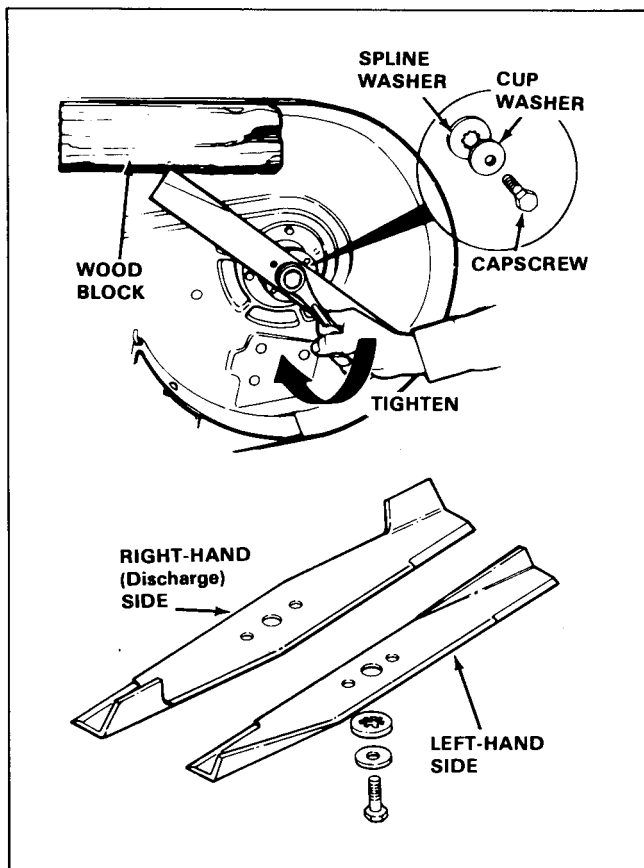


Figure 15.

WARNING

Blade mounting capscrews must be installed with the cup washer and spline washer and then securely tightened. Torque blade mounting capscrews to 60 ft. lbs. (81 N.m).

WARNING

Do not handle the mower blades with bare hands. Avoid touching the cutting edge. Careless or improper handling of blades may result in serious injury.

- Re-install the deflector carriage bolts (A, figure 16) removed in step 2. Secure bolts using the supplied push nuts (B). Push nuts can be installed by pushing down with box end wrench.

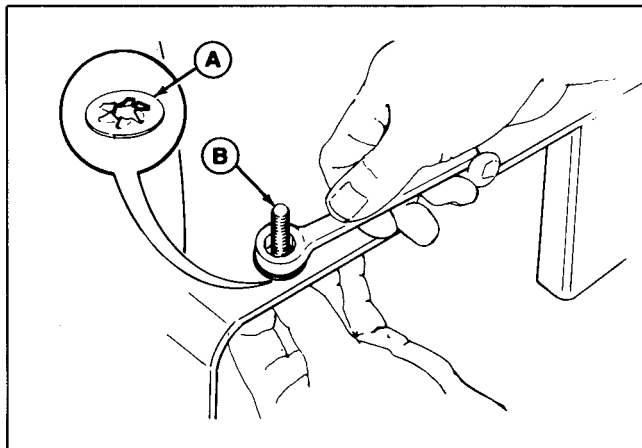


Figure 16.

- A. Carriage Bolt, 3/8-16 x 7-1/2
B. Push Nut

- Place the adaptor (A, figure 17) onto the three carriage bolts (B) and install 3/8" plain washers, 3/8" lockwasher and 3/8" nuts.

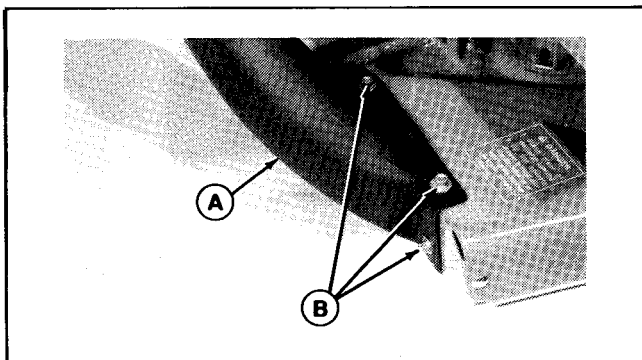


Figure 17.

- A. Adaptor
B. Hardware

8. Insert tube (A, figure 18) onto adaptor (B) so it latches into place.

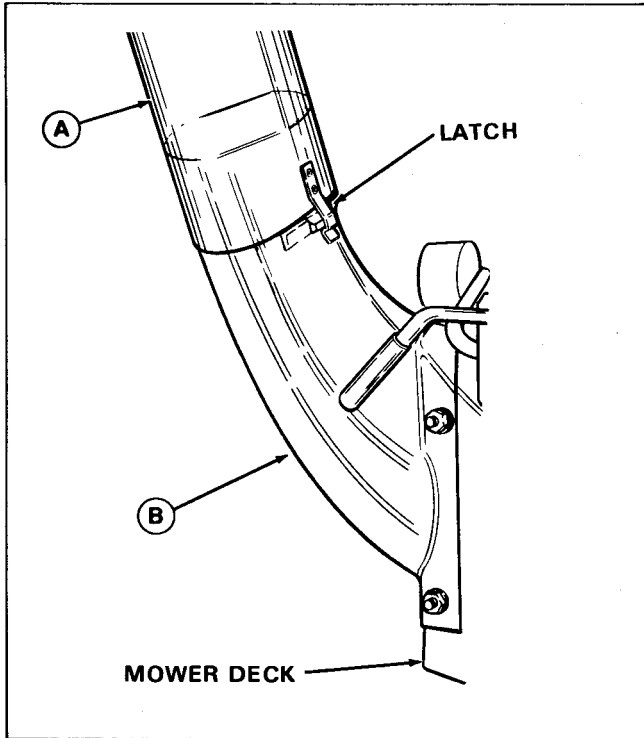


Figure 18.

- A. Tube
- B. Adaptor

9. Install the tube (A, figure 19) to the cart cover elbow (B). Make sure the cover's collar (C) is pulled down over the elbow as far as possible.

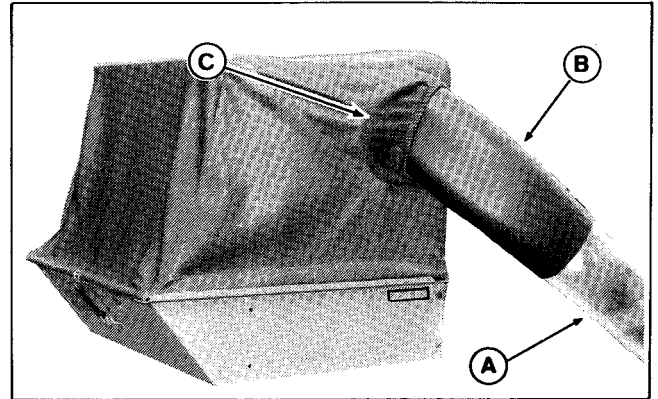


Figure 19.

- A. Tube
- B. Elbow
- C. Collar

Operation

WARNING

For safety reasons, grass and debris are to be removed only after engine is shut off, key removed, and all moving parts stopped.

WARNING

Before raising cover, shut off engine, remove key, and set parking brake.

BEFORE OPERATION

Clear the lawn of sticks, stones, wire and other debris which may be caught or thrown by the mower blades.

Clean the tube with mild detergent (other products may damage tube). The flow of grass can be seen through the tube while mowing.

Check grass condition. If wet, wait until later in the day. If grass is wet, plugging of the tube may occur.

For efficient bagging, air circulation under the mower deck, through the chute and into the bag is very important. For this reason, you should remove grass and debris from underside of mower deck, discharge chute and cover.

The tube and elbow can be removed as an assembly for cleaning.

ATTACHING TO TRACTOR

WARNING

Shut the tractor's engine off before attaching, adjusting, or disconnecting the cart collector. Be sure the complete cart collector is in place before operating the tractor's mower.

WARNING

Do not tow the cart collector on slopes greater than 30% (16.7°) Mow up and down the face of slopes; never across the face of any slope.

1. Attach the cart to the tractor by aligning the two ends (A, figure 20 or 21) of the H-frame to the holes in the bracket (B). Secure the cart to the bracket with two clevis pins (C) and spring clips (D).
2. Use the bottom (as shown) or middle bracket holes to make the cart level (lawn tractor hitch only).

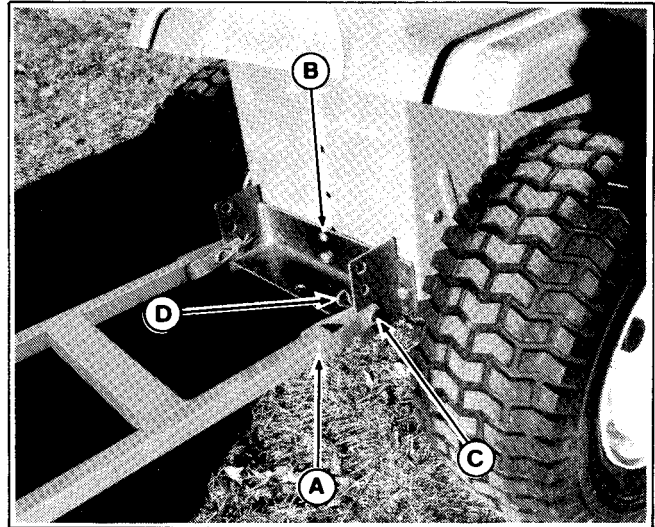


Figure 20. Lawn Tractor

- A. Cart Hitch
- B. Tractor Hitch Bracket
- C. Clevis Pin
- D. Spring Clip

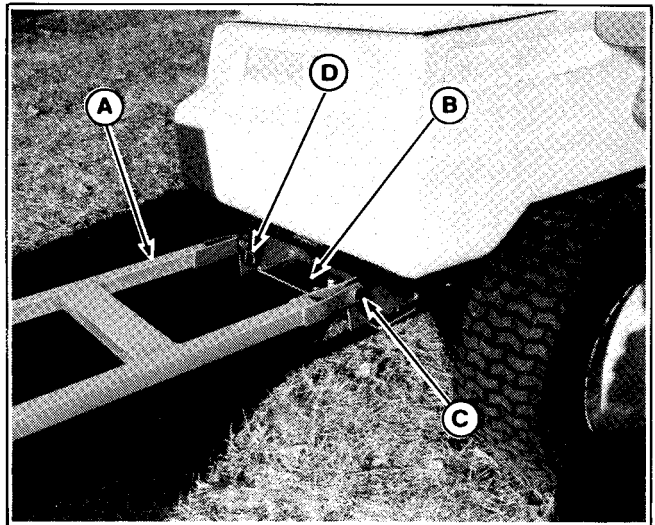


Figure 21. Rear Engine Rider

- A. Cart Hitch
- B. Tractor Bracket
- C. Clevis Pins
- D. Spring Clips

DUMPING GRASS AND LEAVES

1. Back the tractor to the desired place for unloading. Shut the engine off before getting off the tractor seat.
2. Unhook the strap from the door lock and raise the cover assembly to the open position. Lock the cover in place by hooking the strap (A, figure 22) to the locking tab (B).

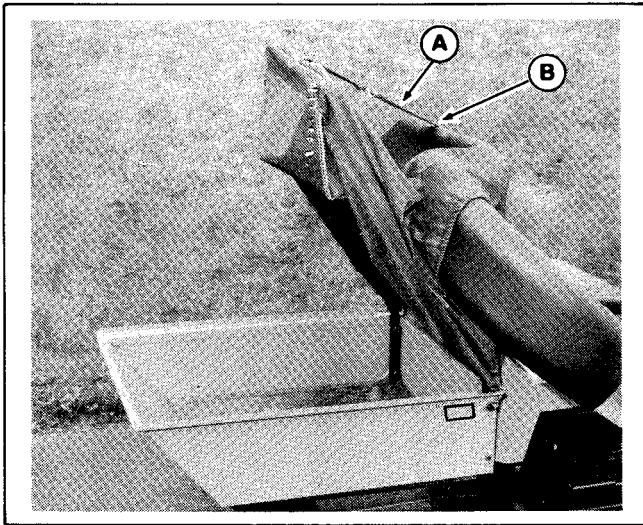


Figure 22.

**A. Cover Strap
B. Lock Tab**

3. Move the latch handle to the unlock position and dump the cart's box. The connecting tube will slide off the elbow and the cart's box will dump at a 90 degree angle for quick unloading.
4. If bagging of the grass clipping is desired, the grass can be pulled from the cart at the curve side into a plastic lawn bag. Also, the grass can be dumped onto a tarp for throwing into a trailer.

WARNING
For safety reasons grass and debris are to be removed only after engine is shut off, key removed, and all moving parts stopped.

WARNING
Before raising cover, shut off engine, remove key, and set parking brake.

CAUTION
Do not haul sharp objects that may puncture the cover.

CAUTION
Do not carry more than 250 lbs. in the cart.

5. The cover can be removed entirely from the cart. Once the cover is removed, the cart can be used for hauling bulky loads.

CAUTION
Be sure to store the cover in a safe place where it cannot be torn.

Maintenance

WARNING
To avoid serious injury, perform maintenance on the cart collector only after stopping the engine and waiting for all moving parts to come to a complete stop. Always remove the ignition key before beginning the maintenance to prevent accidental starting of the engine.

WARNING
The cart cover is subject to wear and deterioration. Check the cover frequently. Use an approved replacement cover.

1. Rinse the cover with a hose when dirty. A dirty cover will inhibit the fast flow of grass clippings into the cover. Do not leave grass or leaves in the cart for a long period of time.
2. Lubricate the swivel wheel before using the cart and monthly thereafter so the swivel will rotate easily. A grease fitting is located at the base of the swivel. Use SAE multi-purpose-type grease.
3. Inflate the 410/350-4 tire to 30 psi.

Troubleshooting

This section provides troubleshooting instructions for the more common and easily corrected problems. See Table 1. For problems not covered, see your dealer.



WARNING

To avoid serious injury, perform maintenance on the cart collector only after stopping the engine and waiting for all moving parts to come to a complete stop. Always remove the ignition key before beginning the maintenance to prevent accidental starting of the engine.

Table 1. Troubleshooting

Problem	Cause/Remedy
<p>1. Leaves and grass not being completely picked up.</p>	<ul style="list-style-type: none"> A. Engine speed too slow. Run at full throttle. B. Ground speed too fast. Use slower ground speed. C. Mower drive belt slipping. Increase belt tension per tractor Operator's Manual. D. Discharge tube plugged. Stop engine and remove key. Then remove and unplug discharge tube. E. Using wrong mower blades. See Setup Instructions. F. Blades not tight. Torque to 60 ft. lbs. G. Mower not level. See tractor Operator's Manual to level mower.
<p>2. Cart collector discharge tube or mower plugs easily.</p>	<ul style="list-style-type: none"> A. Collector full. Empty collector. B. Grass too high. Reduce tractor ground speed, reduce cutting width or raise mower adjustment for the first pass, lower it for the second pass. C. Grass or leaves too wet. Wait for drier conditions. D. Build-up of cut grass in mower or adaptor. Clean thoroughly. E. Using wrong mower blades. See Setup Instructions.

